

## Program Year 6

### First Quarter Report

October 1 to December 31, 2013

## Introduction

In recent years, Senegal experienced high immunization coverage—peaking at a reported 94 percent in 2007, and declining to 70 percent by 2010, with some regions showing coverage as low as 30 percent. This declining coverage contributed to polio and measles outbreaks in 2009 and 2010, which in turn prompted the Global Alliance for Vaccines and Immunization (GAVI) to support the introduction of new vaccines.

In response to declining DTP3 (diphtheria+tetanus+pertussis 3rd dose) coverage, and to prepare for new vaccine introduction, the Maternal and Child Health Integrated Program (MCHIP) was invited in 2010 to lead and coordinate a multi-agency external Expanded Program on Immunization (EPI) review. This review aimed to identify factors that had contributed to recently declining immunization coverage, and to lay the groundwork for strategies to address system and other challenges. MCHIP assisted the Senegal Ministry of Health in analyzing and presenting EPI review findings and recommendations, which were then used to develop an implementation plan to strengthen the National Immunization Program.

In 2012, USAID/Senegal requested that MCHIP support the national EPI in implementing this plan, whose agenda has included reinvigorating the routine immunization system and introducing new, lifesaving vaccines. As this technical assistance required that MCHIP establish an in-country presence, an MCHIP country program was formally launched in Senegal in January 2012. Meanwhile, GAVI had just approved proposals for the introduction of two new vaccines, pneumococcal conjugate vaccine (PCV13) and the MenAfriVac™ vaccine (MenA).

MCHIP has since contributed to national, regional-, and district-level planning for the introduction of numerous vaccines, including MenAfriVac™, PCV13, measles second-dose (MSD), rotavirus, and ongoing initiatives to eliminate measles and rubella. In recognition of Senegal's ambitious plans to introduce several new vaccines in the coming year, and continued technical assistance needed from MCHIP to support these efforts, USAID/Senegal agreed in March 2013 to extend the MCHIP/Senegal program beyond its originally planned September 2013 end date, until the end of June 2014.

More broadly, the goal of the MCHIP/Senegal program has been to work with the EPI and partners to strengthen the routine immunization system, increase vaccination coverage, and introduce two new lifesaving vaccines, PCV13 (nationwide) and MenA (sub-nationally). MCHIP provides technical support at the national level to the National Immunization Program and the Inter-Agency Coordinating Committee (ICC), as the country prepares for and follows up on newly introduced vaccines, while also providing operational guidance through the USAID-funded bilateral projects implemented by IntraHealth and Child Fund.

The MCHIP/Senegal program seeks to achieve the following objectives:

- **Objective 1:** Reinvigorate the routine immunization (RI) system to increase immunization coverage, maximize investments in new and underused vaccines, improve data quality, and reduce inequities among hard-to-reach populations.
- **Objective 2:** Provide technical assistance to the Ministry of Health (MOH)/EPI for the successful introduction of new vaccines approved by GAVI, and for the development of new proposals for submission to GAVI.

- **Objective 3:** Complete closeout activities and support strategic program dissemination at the national and sub-national levels.

## Summary of Quarter 1 achievements

The first quarter of Program Year 6 (PY6) was an intensive one for MCHIP/Senegal, which included milestones such as supporting the introduction of PCV13 and a national MR catch-up campaign, and championing ongoing initiatives to strengthening the routine immunization system through developing and disseminating *aides memoires*, or job aids, that were distributed during the MR campaign. Program activities for the period from October 1<sup>st</sup> to December 31<sup>st</sup>, 2013 are described below.

### New vaccine introduction activities

#### PCV13 vaccine introduction

In preparation for the nationwide launch of PCV13, MCHIP actively participated in an intensive introduction planning workshop from October 17<sup>th</sup> to 21<sup>st</sup>, 2013 that focused on finalizing communication tools targeted for the community at large, including parents. These included information, education, and communication (IEC) tools such as flyers, posters, banners, TV and radio spots/features, and job aids for social mobilizers, with messaging that aimed to raise awareness about the campaign among parents, and inform them of the campaign dates and benefits of vaccines. As a result of this workshop, this package of communication tools was finalized and readied for deployment in the days leading up to the launch date of the vaccine.

MCHIP was then a key convener of the vaccine's official launch ceremony, a high-visibility, national-level event held on November 5<sup>th</sup>, 2013 that featured a keynote address from the President of the Senegal, key stakeholder organizations such as UNICEF, GAVI, and WHO, and national and international media. MCHIP's intensive technical support extended from development of the vaccine introduction plans and microplans; preparations for the launch ceremony; ensuring country readiness for introduction through follow-up on technical issues such as adverse effects following immunization (AEFI), injection safety, waste management, and vaccine stock management; addressing post-introduction issues during technical ICC meetings; and accompanying EPI during selected supportive supervision visits to monitor administration of the vaccine following its launch. A post-introduction evaluation has been tentatively scheduled for spring 2014.



A screenshot of MCHIP/Senegal's success story on PCV13 introduction, which was shared through JSI, MCHIP, and "USAID Impact" blogs (shown here) in commemoration of World Pneumonia Day on November 12, 2013.

#### Measles-Rubella Vaccine introduction

ATELIER DE VALIDATION DES MICROS PLANS POUR LA CAMPAGNE DE MASSE CONTRE LA ROUGEOLE ET LA RUBEOLE				
FEUILLE DE PRESENCE				
LE 02 OCTOBRE 2013				
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Participant list from national-level workshop for the validation of district-level MR campaign microplans, October 2013. Photo: MCHIP.

The beginning of the first quarter of PY6 also included further preparing for and conducting the MR catch-up campaign, in which MCHIP played a key technical support and advocacy role. MCHIP's immunization staff in country contributed to the national-level refinement and validation of regional and district microplans in early October 2013.

The team also participated in a workshop from October 7<sup>th</sup> to 11<sup>th</sup>, 2013 to develop communication materials for the campaign. As with materials and messages developed for PCV13 introduction, these communication tools included fliers, job aids, posters, banners, and

radio and television features that were produced and distributed for use at multiple levels. The Ministry of Health's Communications Subcommittee led this activity, with funding from GAVI and contributing efforts from MCHIP and other partners. These messaging efforts were part of a broader communications plan that was also finalized during the October workshop, and which also accounted for the sensitization of and advocacy among religious and community leaders and other authorities (e.g., representatives from the Ministry of Education and others ministries, local administrations, and tentatively congressmen or mayors).

As the November campaign dates approached, the EPI Steering Committee convened three meetings during the quarterly reporting period. These meetings, which also included EPI sub-committee representatives, served to update partners on the status of campaign preparation; ensure sufficient cold chain storage capacity for the vaccine, which arrived in country in October; confirm that all technical (e.g., data collection) and communication tools would be finalized, printed, and distributed in time; ensure needed vaccine supply and management; and confirm the timely delivery of other needed supplies and financing to the regional and district levels.

From November 3<sup>rd</sup> to 8<sup>th</sup>, 2013, GAVI's Board of Directors sent a consultant to Senegal to help ensure that MR campaign activities were being designed and planned so as to strengthen routine immunization and surveillance. The consultant met with all ICC sub-committees, some MCHIP staff, and health teams from two districts in Dakar to assess their level of readiness for the campaign. The consultant shared initial findings from these stakeholder interviews and assessment in a meeting with the national ICC team: efforts around MR campaign preparations to reinforce routine immunization seemed to be in line with the Using Measles Activities to Strengthen Immunization and Surveillance (UMASIS) module, as reflected in the materials developed during the July 2013 workshop with MCHIP's technical support. These materials included microplanning guidelines, training guides for facilitators and health workers, data collection tools, and job aids for health district managers, supervisors, health workers, and community mobilizers, as well as guidelines for supervision at the regional, district, and health facility/health worker levels. While the consultant recognized MCHIP's active role in implementing the UMASIS module, he recommended that this module be adapted and revised to better ensure understanding of how it should be used in different country contexts.

In line with this UMASIS module, MCHIP led the development pre-testing, and distribution of *aides memoires*, or job aids, to be used by at the district and health facility levels to reinforce knowledge around routine immunization in four key areas: vaccine storage, vaccine transport, maintenance of refrigerators, and interpersonal communication (see Annex A for copies of these job aids). These four topics had been identified on the basis of findings from routine MOH supportive supervision visits, which revealed these topics as critical areas in need of address. This MCHIP-led initiative, in collaboration with WHO, UNICEF, a communications consultant, graphic designer, and team of investigators, aimed to help address health worker training gaps around key immunization topics in conjunction with the MR campaign. MCHIP also financed the printing both of these *aides memoires*, and of an MR campaign job aid for social mobilizers. Cascade trainings of health workers were conducted as planned in mid-November, and MCHIP capitalized on these trainings to introduce these newly developed *aides memoires* (by incorporating the distribution of debriefing on these *aides memoires* during already planned training sessions).



Pre-testing of UMASIS *aides memoires* at a health post in Dakar-Ouest.  
Photo: MCHIP.

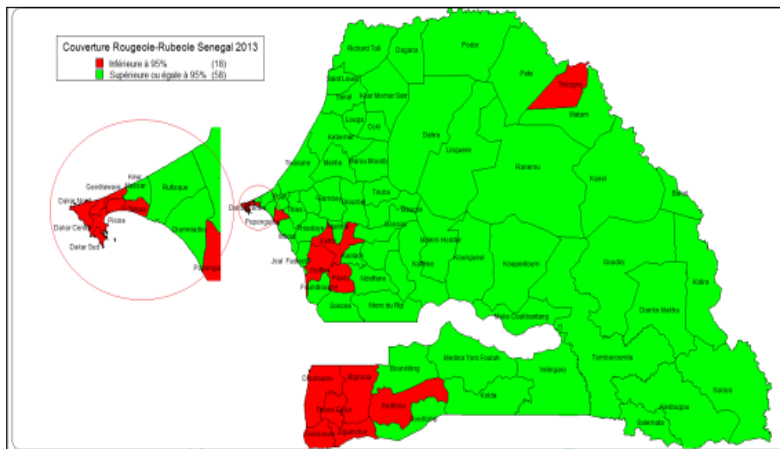
MCHIP's engagement in preparing for and conducting the MR campaign helped ensure the timely availability of needed financial resources, materials, tools, and vaccines. The campaign was then conducted from November 18<sup>th</sup> to 27<sup>th</sup>, 2013, with official launches in all regions and districts in line



with the national launch. MCHIP's headquarters-based Senior Technical Immunization Advisor traveled to Senegal to participate with in-country technical staff and partners in campaign supervision activities in three regions: Kaolack, Kaffrine, and Louga. Special attention was given to documenting and follow up on the extent to which attention was given to routine immunization during the campaign. MCHIP's staff participated in supervision of the MR campaign.

Initial administrative data and coverage survey findings suggested the success of the campaign. National coverage was reported at 101 percent—including about 24 percent, or 18 out of 76 districts, achieving coverage of 95 percent or higher. Vaccination coverage rates, as based on population estimates, ranged from 49.1 percent (Thionck Essyl, in the region of Ziguinchor) to as low as 5 percent (in Rufisque district, in the Dakar region). Strong microplanning in preparation for the campaign also resulted in high numbers of the population being identified for immunization.

It should be noted that the greater than 100 percent reported immunization coverage reflects administrative data shared by the EPI Data Manager and produced by the Ministry of Health, based on the estimated population size. It is clear that such coverage figures also reflect a problematic denominator, or estimated population size, however, due to the unknown denominator. In keeping with guidance from the UMASIS module, MCHIP and partners have accordingly advised the Ministry's Health Manager to account for this finding when refining the routine immunization microplans going forward.



MR vaccine coverage achieved during November 2013 MR vaccine campaign. Map: Senegal Division of EPI/Direction of Prevention/Ministry of Health, 2013.

The proportion of zero-dose measles is 15.9 percent in the 9- to 11-month age group, and 0.8 percent in the 12- to 59-month age group at the national level. A small proportion of adverse events following immunization (AEFI) cases (101 cases) were reported during the campaign. Supervision activities during the campaign helped reinforce many RI system-related deficiencies highlighted earlier, particularly around vaccine storage. During their supervision visits, MCHIP staff also observed that routine immunization was seldom addressed during the campaign. In the district of Koki, for example, the immunization

status of children was systematically assessed through recall (i.e., mothers being asked the immunization status of their children) and vaccination cards; children who did not complete the vaccination series were referred for vaccination services.

From December 11<sup>th</sup> to 20<sup>th</sup>, 2013, MCHIP participated in a post-MR vaccine campaign coverage survey through which 22,788 individuals were interviewed. A consultant from the US Centers for Disease Control and Prevention (CDC) presented the survey results at the end of the month: results showed that all districts achieved a coverage of at least 90 percent, with about 86 percent, or 65 out of 76 districts, reporting coverage of 95 percent or higher. All regions except Kedougou reported 95 percent coverage. Reasons for non-vaccination during the campaign (677 individuals, or about 3 percent of all survey respondents) included the “absence of the children” (38 percent); lack of information among the community (at 14 percent, and particularly among mothers who responded to the post-campaign survey); parents who were unavailable or forgot about the campaign (10 percent); and logistical challenges at the vaccination site, such as vaccine stockouts or health worker absence (9 percent of cases).

The percentage of children ages 12 to 23 months who were not yet vaccinated against measles (zero dose) prior to the MR vaccine campaign was reported as 8 percent, with actual levels varying between 1 percent and 22 percent based on area. The MCHIP focal regions of Louga, Thies, and Kaffrine

reported between 5 percent and 10 percent previously unvaccinated children, Diourbel and Matam reported percentages between 10 percent and 15 percent, and the Kaolack and Tambacounda Kédougou regions reported percentages exceeding 15 percent for children ages 12 to 23 months of age.

Survey results also suggested that among those parents who participated in the MR vaccine campaign, 42 percent had heard of the campaign through health workers, 26 percent through community mobilizers, and 21 percent through radio, and 29 percent through television announcements (with some people receiving messaging through more than one media channel).

### **Collaborative RI strengthening initiative with IntraHealth and ChildFund**

During the latter part of the first quarter of PY6, and through consultation with USAID, MCHIP revived earlier efforts to launch a collaboration for intensified RI strengthening activities in four target districts with two other USAID-funded projects in Senegal: the Senegal Health Services Improvement Program, led by IntraHealth, and focusing on local health providers' clinical, leadership, and management skills and overall quality of health services, and the five-year Community Health Program (PSSC), led by ChildFund. Technical staff from all three organizations, along with representatives from the Ministry of Health, met on December 20<sup>th</sup>, 2013 at ChildFund's office in Thies, for a preliminary planning meeting. This meeting was an opportunity to share experiences toward the development of a joint action plan to implement microplans to revitalize the EPI; improve Intermittent preventive treatment in infants (IPTi2) in pilot districts; establish an activity plan; identify roles and responsibilities; and consolidate the timetable of collaborative activities for the period January 1<sup>st</sup> to August 31<sup>st</sup>, 2014 (although for MCHIP/Senegal, only until the program's end date of June 30<sup>th</sup>, 2014).

As an outcome of this meeting, it was agreed that IntraHealth would officially inform USAID's Regional Coordinator of Health Programs of its plans to revise and finalize the joint workplan using available resources, and that ChildFund would develop a timetable by area of responsibility. MCHIP will finalize a draft Memorandum of Understanding (MoU) at the beginning of the following quarter, incorporating all partners' December planning discussions, and coordinate partner reviews and signature to signal the formal launch of this collaboration.

## Key results

Items	Achievements	Observations & next steps
New vaccine introduction: PCV13	<ul style="list-style-type: none"> <li>Communication tools (fliers, posters, banners, audio and video clips for radio and television features) developed with MCHIP's support.</li> <li>Official launch of PCV13 on November 5th, 2013, with high-visibility endorsement by President of Senegal.</li> <li>Ongoing supervision of vaccine introduction activities.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing supervision of introduction activities.</li> <li>Planning for post-introduction evaluation.</li> <li>Ongoing participation in ICC sub-committees meetings.</li> </ul>
Introduction of rubella vaccine through MR campaign	<ul style="list-style-type: none"> <li>Successful implementation of measles/rubella (MR) mass campaign. National-level administrative data indicated 101% immunization coverage, with 18 of 76 districts reporting coverage &gt;95%.</li> <li>MCHIP-led development, pre-testing, finalization, and printing of health care worker job aids for RI strengthening. By end of first quarter, these were distributed to districts in 11 out of 14 regions in Senegal, and addressed vaccine safety and handling, cold chain storage and quality, vaccine transport, maintenance of refrigerators, and interpersonal communication.</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of MR vaccine in routine immunization as second dose.</li> <li>Follow -up of UMASIS-related activities.</li> </ul>
Collaboration with IntraHealth and ChildFund	<ul style="list-style-type: none"> <li>Joint planning meetings held with MOH, IntraHealth, MCHIP, and ChildFund to establish a collaborative plan to reinforce RI in 4 target districts.</li> <li>Joint implementation plan drafted and MoU draft begun.</li> </ul>	<ul style="list-style-type: none"> <li>Finalization and signing of MoU.</li> <li>Implementation of activities.</li> <li>Revision/refinement of microplans.</li> <li>Implementation of planned activities.</li> <li>Documentation of outcomes and performance in target districts.</li> </ul>